

TYPE EXAMINATION CERTIFICATE



Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- [3] Type Examination Certificate Number: **DEMKO 05 ATEX 0431689X Rev. 5**
- [4] Product: **Overvoltage Protectors: Model OVP2**
Decouplers & Isolators: Models SSD, GI, GD, GCMD, GMD, PCD and TSD
- [5] Manufacturer: **Dairyland Electrical Industries Inc.**
- [6] Address: **340 Business Park Circle, PO Box 187, Stoughton, WI 53589 USA**
- [7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.
- The examination and test results are recorded in confidential report no. **US/UL/ExTR14.0031/03.**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN IEC 60079-0:2018 EN IEC 60079-7: 2015 +A1:2018**
- except in respect of those requirements listed at item 18 of the Schedule.
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.
- [12] The marking of the product shall include the following:

 **II 3 G Ex ec IIC T4 Gc**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval

Date of issue: 2005-12-28

Re-issued: 2021-06-29

Certification Body

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Schedule
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[15]

Description of Equipment:

These devices are intended to be used to provide AC grounding and DC blocking for cathodic protection of underground pipelines and similar installations in explosive atmospheres.

Nomenclature:

Overvoltage Protectors:

Models OVP2, followed by 1/1, 1.5/1.5, 2/1, 2/2, 3/1, 4/1, followed by 1.2, may be followed by 75.

Models OVP2, followed by 1/1, 1.5/1.5, 2/1, 2/2, 3/1, 4/1, followed by 2.0, 3.7, or 5.0, may be followed by 100.

<u>OVP2</u>	<u>2/1</u>	<u>2</u>	<u>100</u>
I	II	III	IV

I. Basic Model Series and device name.

OVP2 – Overvoltage protector

II. Designates Peak Blocking Voltage (Negative Peak/Positive Peak).

1/1	-	-1V/+1V
1.5/1.5	-	-1.5V/+1.5V
2/1	-	-2V/+1V
2/2	-	-2V/+2V
3/1	-	-3V/+1V
4/1	-	-4V/+1V

III. Designates AC Current Rating (rms).

- 1.2 - 1.2 kiloamperes
- 2.0 - 2.0 kiloamperes
- 3.7 - 3.7 kiloamperes
- 5.0 - 5.0 kiloamperes

IV. Optional - Surge Current Rating

- 75 – 75 kA.
- 100 – 100 kA.



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[14]

Schedule

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Decouplers & Isolators:

Models SSD, GI, GD, GCMD, GMD, PCD or TSD followed by 1/1, 1.5/1.5, 2/1, 2/2, 3/1, 4/1, followed by 1.2, may be followed by 75. Models SSD, GI, GD, GCMD, GMD, PCD or TSD followed by 1/1, 1.5/1.5, 2/1, 2/2, 3/1, 4/1, followed by 2.0, 3.7, or 5.0, may be followed by 100.

All decouplers and isolators are identical, except for the prefix number (SSD, GI, GD, GCMD, GMD, PCD or TSD). Model OVP2 devices are not provided with a capacitor. Model PCR, SSD, GI, GD, GCMD, GMD, PCD and TSD devices are provided with a capacitor.

<u>SSD</u>	<u>2/1</u>	<u>1.2</u>	<u>100</u>
I	II	III	IV

I. Basic Model Series.

- SSD – Solid state decoupler
- GI – Galvanic isolator
- GD – Galvanic decoupler
- GCMD – Gradient control mat decoupler
- GMD – Ground mat decoupler
- PCD – Pipeline casing decoupler
- TSD – Test station decoupler

II. Designates Peak Blocking Voltage (Negative Peak/Positive Peak).

1/1	-	-1V/+1V
1.5/1.5	-	-1.5V/+1.5V
2/1	-	-2V/+1V
2/2	-	-2V/+2V
3/1	-	-3V/+1V
4/1	-	-4V/+1V

III. Designates AC Current Rating (rms).

- 1.2 - 1.2 kiloamperes
- 2.0 - 2.0 kiloamperes
- 3.7 - 3.7 kiloamperes
- 5.0 - 5.0 kiloamperes

VI. Optional - Surge Current Rating

- 75 – 75 kA
- 100 – 100 kA.

Temperature range

The ambient temperature range is - 45 °C to + 65 °C

Electrical data

All model devices may have a lightning surge current rating of 100 kA (8 x 20µs waveform)

Installation instructions

For ambient temperatures below -10 degree C and above +60 degree C use field wiring suitable for both minimum and maximum ambient temperature.

Routine tests

No routine testing is required.

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Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

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Special Conditions of Use:

- Plastic enclosures are to be cleaned or wiped only with a damp cloth.
- During installation the device should be handled and mounted in a location so that direct impact is minimized.

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Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

Series OVP2, SSD, GI, GD, GCMD, GMD, PCD and TSD have in addition passed the tests for Ingress Protection to IP 68 in accordance with EN60529: 1991+A1:2000+A2:2013.

